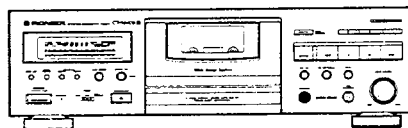


Service Manual



PION-04971



ORDER NO.
RRV1498

STEREO CASSETTE DECK

CT-S550S

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	CT-S550S		
HYXJ	○	AC220-230V	
HYXJ/GR	○	AC220-230V	

CONTENTS

1. EXPLODED VIEWS, PACKING AND PARTS LIST	2
2. BLOCK DIAGRAM	8
3. SCHEMATIC AND PCB CONNECTION DIAGRAMS	9
4. PCB PARTS LIST	16
5. TEST MODE	19
6. ADJUSTMENTS	23
7. IC INFORMATION	27
8. FL INFORMATION	30
9. PANEL FACILITIES	31
10. SPECIFICATIONS	32

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T-SSR FEB. 1996 Printed in Japan

1. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES:

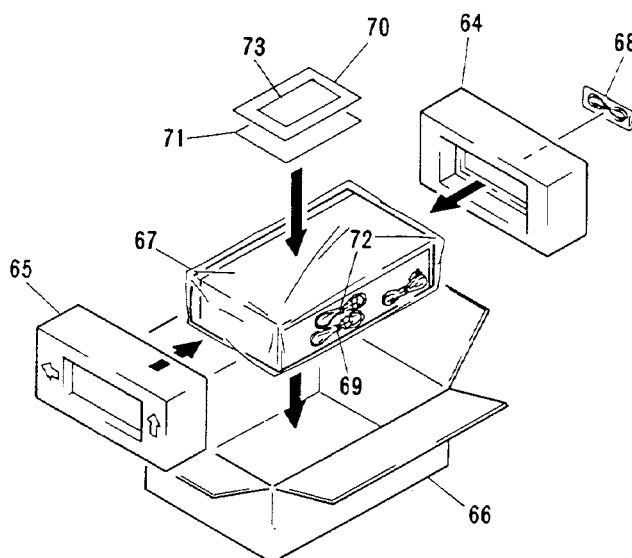
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "©" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

1.1 EXTERIOR AND PACKING

Parts List

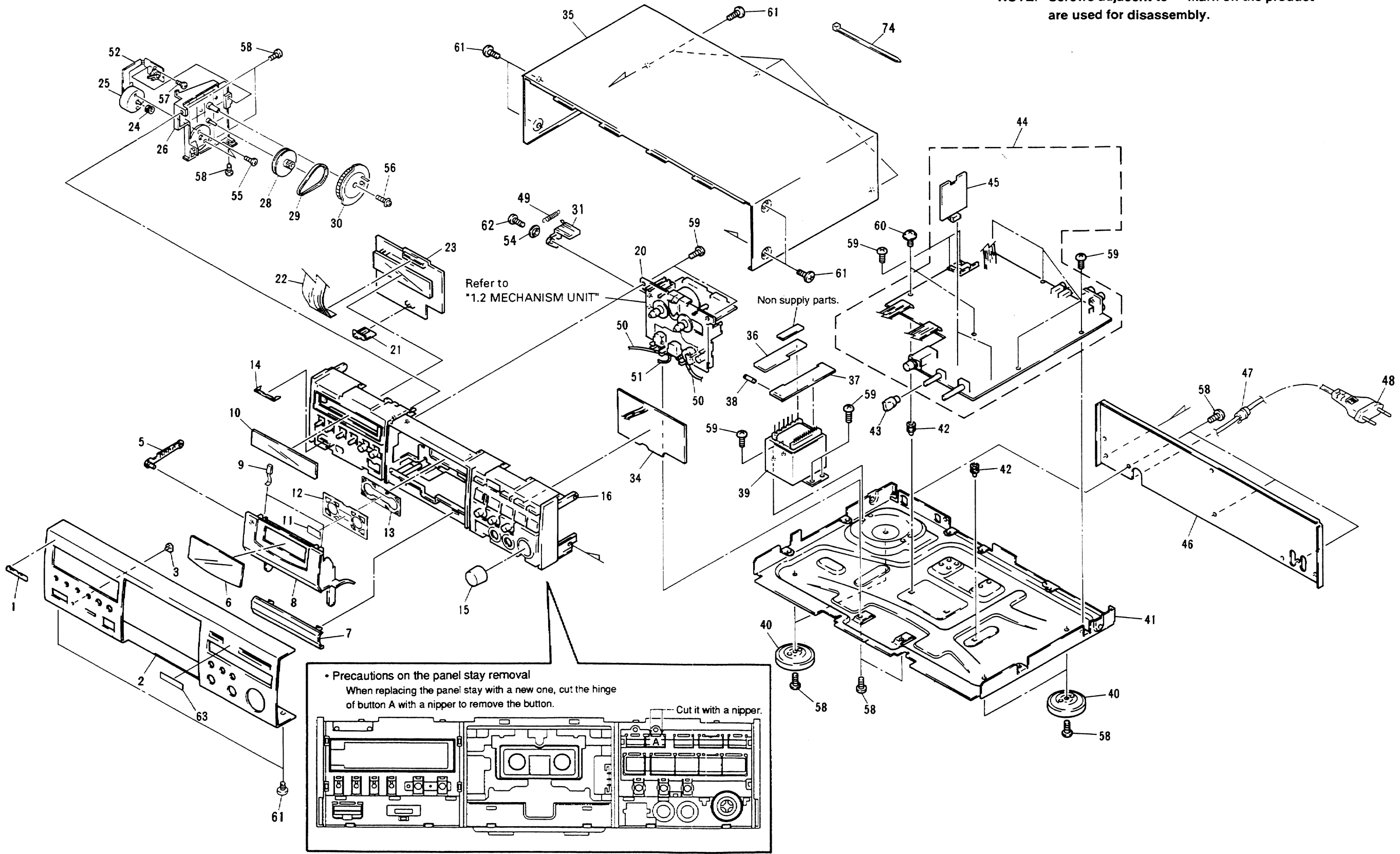
Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	1	Name plate	PAM1608		51	Connector assy 2P	RKP1681
	2	Front panel	RAH2719	NSP	52	POCM UNIT	RWZ3867
	3	LED lens	PNW2019		53	.....
	4	.....			54	Eject collar	RLA1303
	5	Joint	RNK1895		55	Screw	BMZ26P040FMC
	6	Door lens	RAH2570		56	Screw	IPZ20P080FMC
	7	Azimuth cover	RAH2567		57	Screw	BBZ26P060FMC
	8	Door pocket	RAH2563		58	Screw	BBZ30P080FCC
	9	Half pressure spring	RBK1004		59	Screw	BBZ30P060FCC
	10	FL lens	RAH2558		60	Screw	IBZ30P150FCC
	11	Remain display paper	REE-113		61	Screw	BBZ30P080FZK
	12	Stabilizer panel	RAH1483		62	Screw	BBZ26P100FMC
	13	Stabilizer B	REB1085		63	Getter	RAX1049
	14	Power cap	RAC1998		64	Pad (L)	RHA1213
	15	VR knob	RAC1707		65	Pad (R)	RHA1212
	16	Panel stay	REA1196		66	Packing case	RHG1737
	17	.....			67	Sheet	RHX-034
	18	.....			68	Connection cord assy	RDE1026
NSP	19	.....			69	Control cord	RDE1044
	20	MECHANISM UNIT	RYM1251		70	Operating instructions (French/Italian/Dutch/ Swedish/Spanish/Portuguese) (HYXJ type only)	RRD1185
	21	Slide knob	RAC1713		71	Operating instructions (English/German)	RRE1136
	22	Lead card 29P	RDD1356		72	Cord with mini plug	PDE1267
	23	FL UNIT	RWZ3859		73	Warranty card	ARY7009
	24	Motor pulley	PNW1634		74	Binder	ZCA-T18S
	25	DC motor 0.75W	PXM1010				
	26	Loading base assy	RXA1548				
	27	.....				
	28	Pulley gear	RNK1517				
	29	Rubber belt	PEB1127				
	30	Cam gear	RNK1896				
	31	SW lever	RNK1897				
	32	.....				
	33	.....				
	34	OPSW UNIT	RWZ3861				
	35	Bonnet	REA1192				
NSP	36	TRN 1 PCB	RNZ3004				
NSP	37	TRN 2 UNIT	RWZ3865				
Δ	38	Fuse (T 1.25A)	AEK1055				
Δ	39	Power transformer	RTT1309				
	40	Insulator	PNW1912				
NSP	41	Main chassis	RNB1113				
NSP	42	Spacer	RNY-404				
	43	Balance knob	RAC1705				
	44	MAIN UNIT	RWZ3857				
	45	DOLBY S UNIT	RWX1120				
	46	Rear panel	RNA2034				
Δ	47	Strain relief	CM-22B				
Δ	48	AC power cord	PDG1043				
	49	Ratchet spring	RBH1008				
	50	Connector assy 3P	RKP1673				

Packing

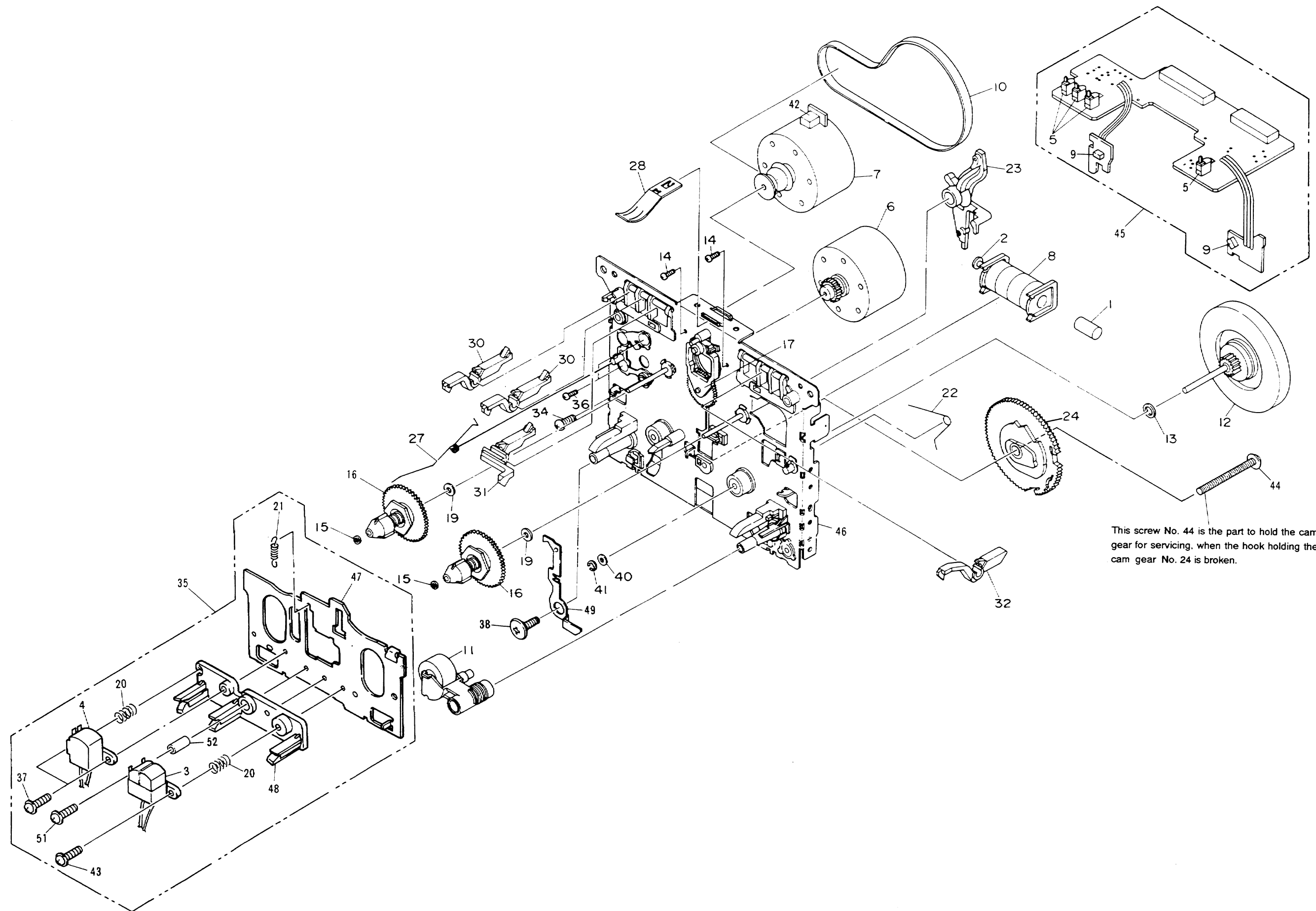


Exterior

NOTE: Screws adjacent to ▼ mark on the product are used for disassembly.



1.2 MECHANISM UNIT

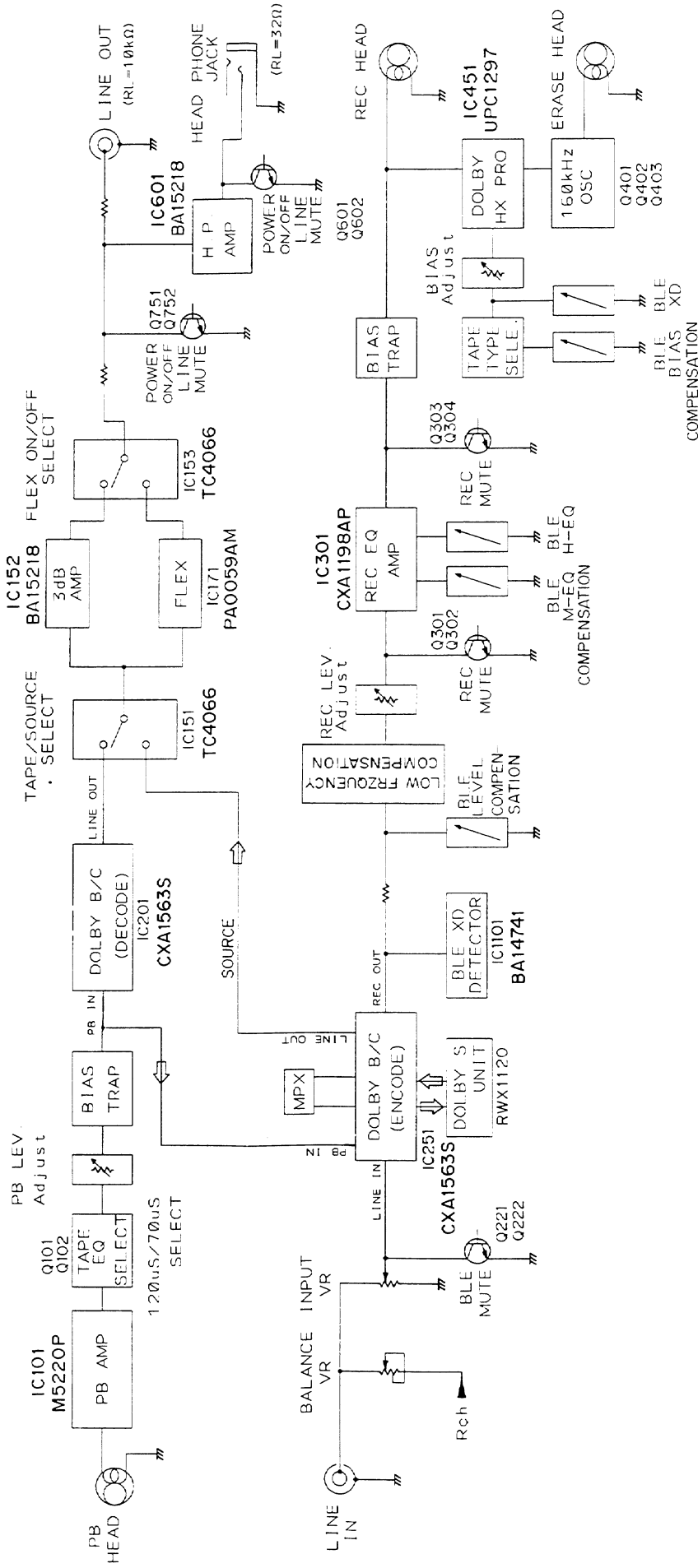


Parts List

Mark	No.	Description	Parts No.
	1	Fixed core	RLA1130
	2	Planger	RLA1132
	3	Head (R/P)	RPB1047
	4	Head (E)	RPB1060
	5	Push SW	RSG1018
	6	MTR rael BLK	RXM1057
	7	MTR main BLK	RXM1058
	8	Solenoid BLK	RXP1010
	9	Photo - transistor	SPI33534FG
	10	Main belt	REB1163
	11	Pinch roller assy	RXA1183
	12	F/W assy	RXA1346
	13	Washer	WA26D045D025
	14	Screw 2.6 x 6.4 ZN	RBA1076
	15	Washer	RBF - 057
	16	Reel base BLK	RXA1184
	17	Idler BLK	RXA1248
	18	.....
	19	Washer	RBF1038
	20	Azimuth SP	RBH1076
	21	Haed base SP	RBL1003
	22	Slide SP	RBH1239
	23	Play arm	RNK1525
	24	Cam gear (3R)	RNK1672
	25	.....
	26	.....
	27	Eject prevention spring (L)	RBH1234
	28	Spring cassette	RBK1048
	29	.....
	30	Detector lever (REC)	RNK1527
	31	Metal detector lever (L)	RNK1529
	32	Detector lever (P)	RNK1543
	33	.....
	34	Screw	RBA1101
	35	Plate HD BLK	RXA1488
	36	Screw	PMA26P050FMC
	37	F lock screw	RBA1031
	38	Screw (7.7)	RBA1048
	39	.....
	40	Washer	WA26D047D050
	41	Washer	YE15FUC
	42	Holder cushion (L)	RED1027
	43	F lock screw	RBA1102
	44	Screw	RBA1068
	45	PCB control BLK	RXA1487
	46	Chassis base BLK	RXA1557
	47	Head base	RNE1390
	48	Head spacer	RNK2106
	49	Eject prevention arm (L)	RNE1199
	50	.....
	51	Screw	PMZ20P080FMC
	52	Spacer	RLA1275

2. BLOCK DIAGRAM

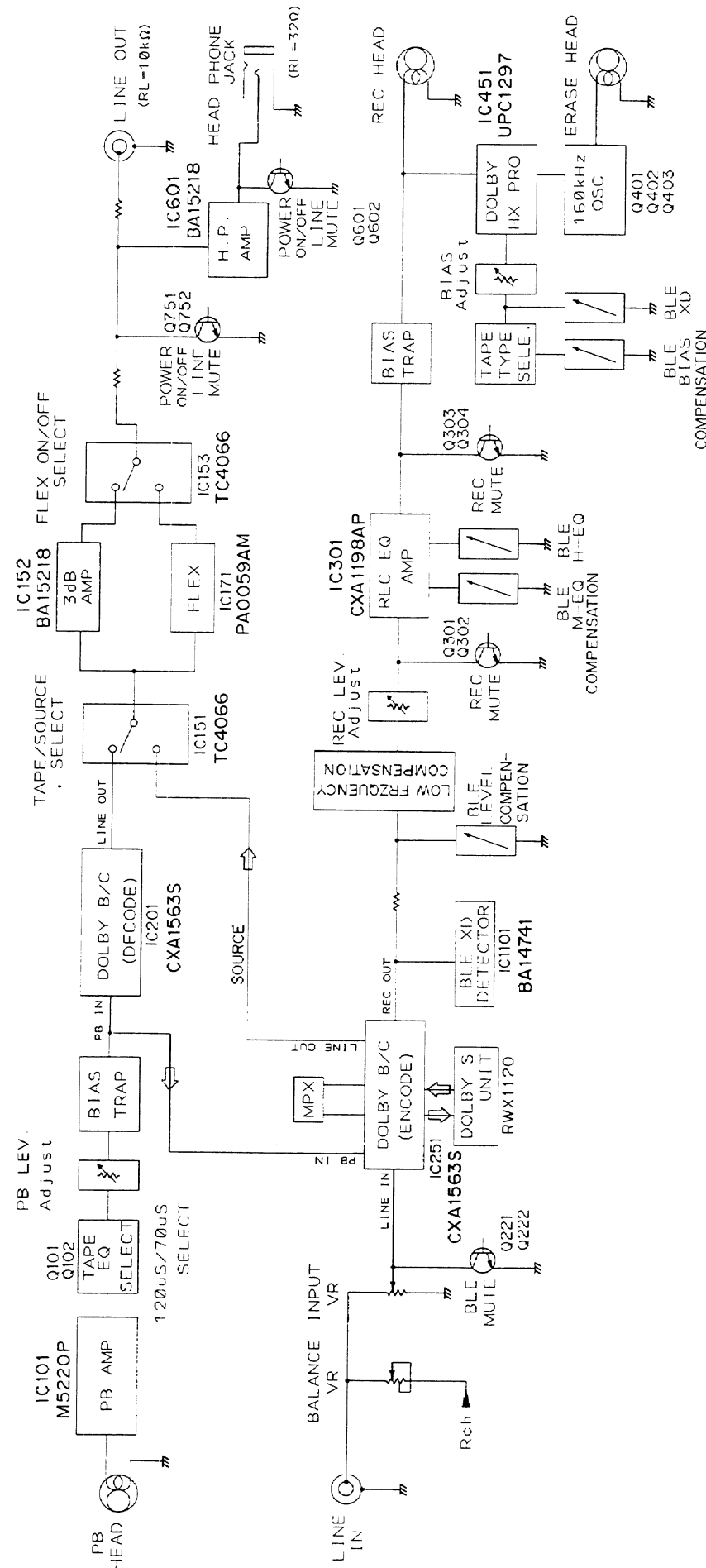
⇒ : On signals when a Dolby S sound is played back using CT-S550S
• When a Dolby S sound is played back using CT-S550S, signals are output to LINE OUT via the encoder side Dolby IC.
And a Dolby S sound is recorded and played back using CT-S550S, a simultaneous playback sound (tape) becomes a Dolby B sound.



⇒ : On signals when a Dolby S sound is played back using CT-S550S

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And a Dolby S sound is recorded and played back using CT-S550S, a simultaneous playback sound (tape) becomes a Dolby B sound.

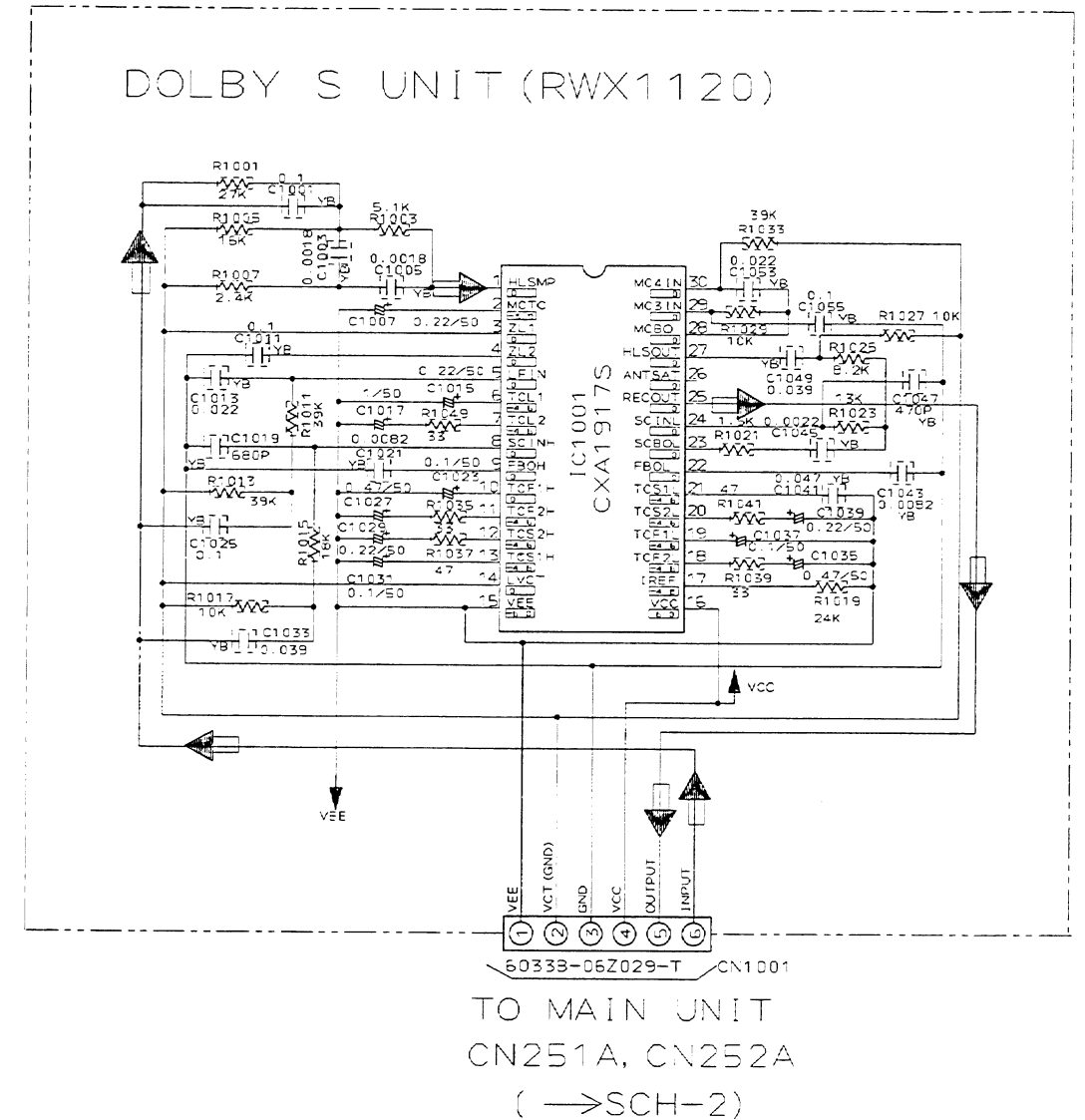


3.1 DOLBY S UNIT














SIGNAL ROUTE


➡: ENCODE SIGNAL ROUTE

SCH-1



(Type 6A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
 2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
 3. **RESISTORS:**
Unit: k Ω , M, M Ω , or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ or $\pm 5\%$ unless otherwise noted.
 4. **CAPACITORS:**
Unit: p, μ or μ F unless otherwise noted.
Ratings: capacitor (μ F)/voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.
 5. **COILS:**
Unit: m, mH or μ H unless otherwise noted.
 6. **VOLTAGE AND CURRENT:**
 or \sim V
DC voltage (V) in STOP mode unless otherwise noted
 mA or \sim mA
DC current in STOP mode unless otherwise noted
 7. **OTHERS:**
 -  or  : Adjusting point.
 -  : Measurement point.
 - The  mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
 8. **SCH—□ ON THE SCHEMATIC DIAGRAM:**
 - SCH—□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
 9. **SWITCHES** (Underline indicates switch position):
 OPSW UNIT
 S1601 :  STOP
 S1602 :  REC
 S1603 :  PAUSE
 S1604 : MONITOR TAPE/SOURCE
 S1605 : CD-SYNCHRO
 S1606 : RETURN
 S1607 :  REC MUTE
 S1608 :  PLAY
 S1609 :  FF
 S1610 :  REW
 S1611 : FLEX
 S1612 : BLE XD

 FL UNIT
 S1501 : COUNTER RESET
 S1502 :  EJECT
 S1504 : COUNTER MODE
 S1505 : DOLBY NR OFF/B/C/S
 S1506 : DISP OFF
 S1507 : POWER STANDBY/ON/OFF
 S1508 : MPX FILTER
 S1509 : METER RANGE
 S1510 : TIMER MODE (REC—OFF—PLAY/REPEAT)

SCH-1

DOLBY S UNIT

DOLBY S UNIT

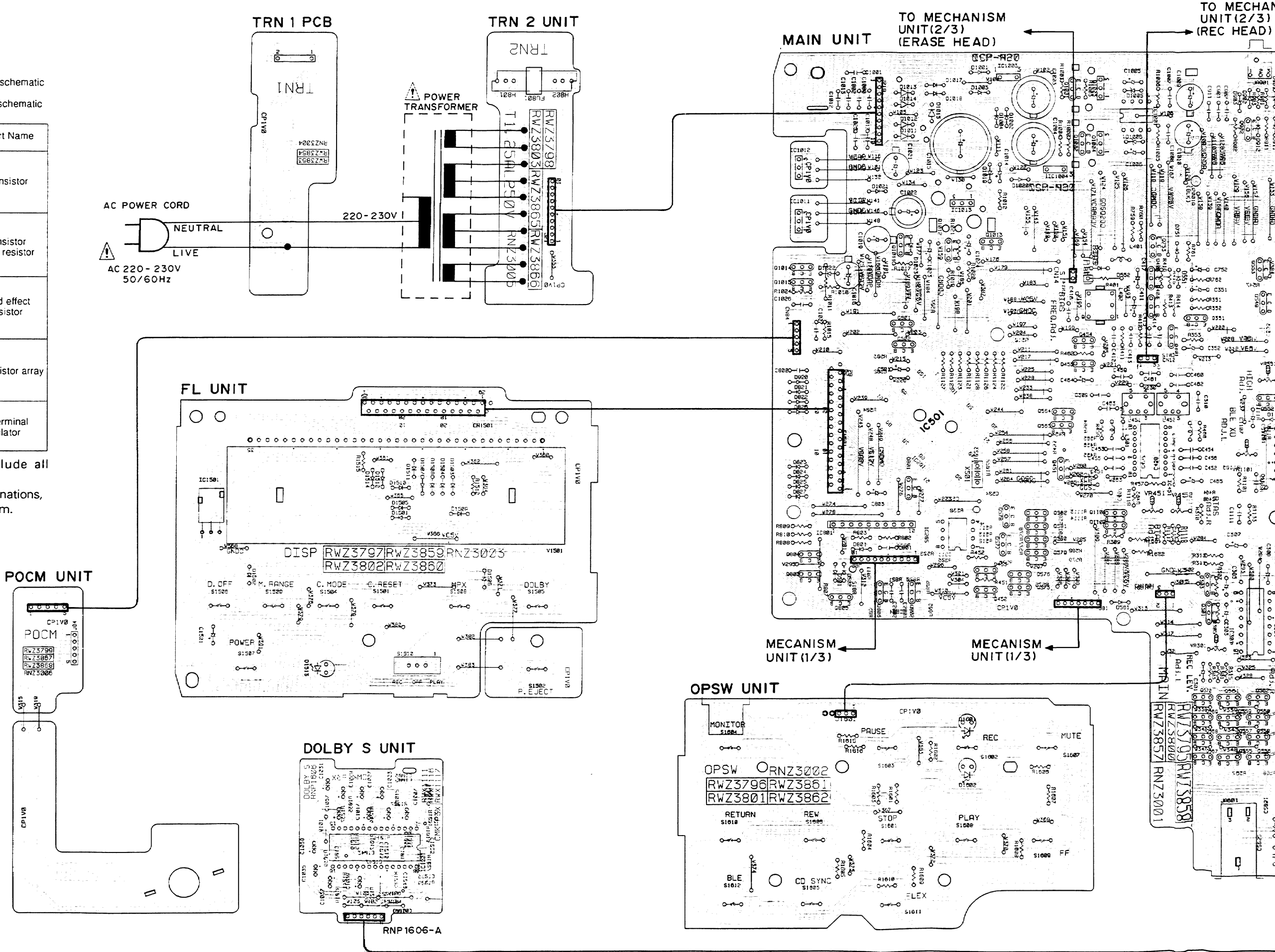
SCH-1

• This diagram is viewed from the mounted parts side.

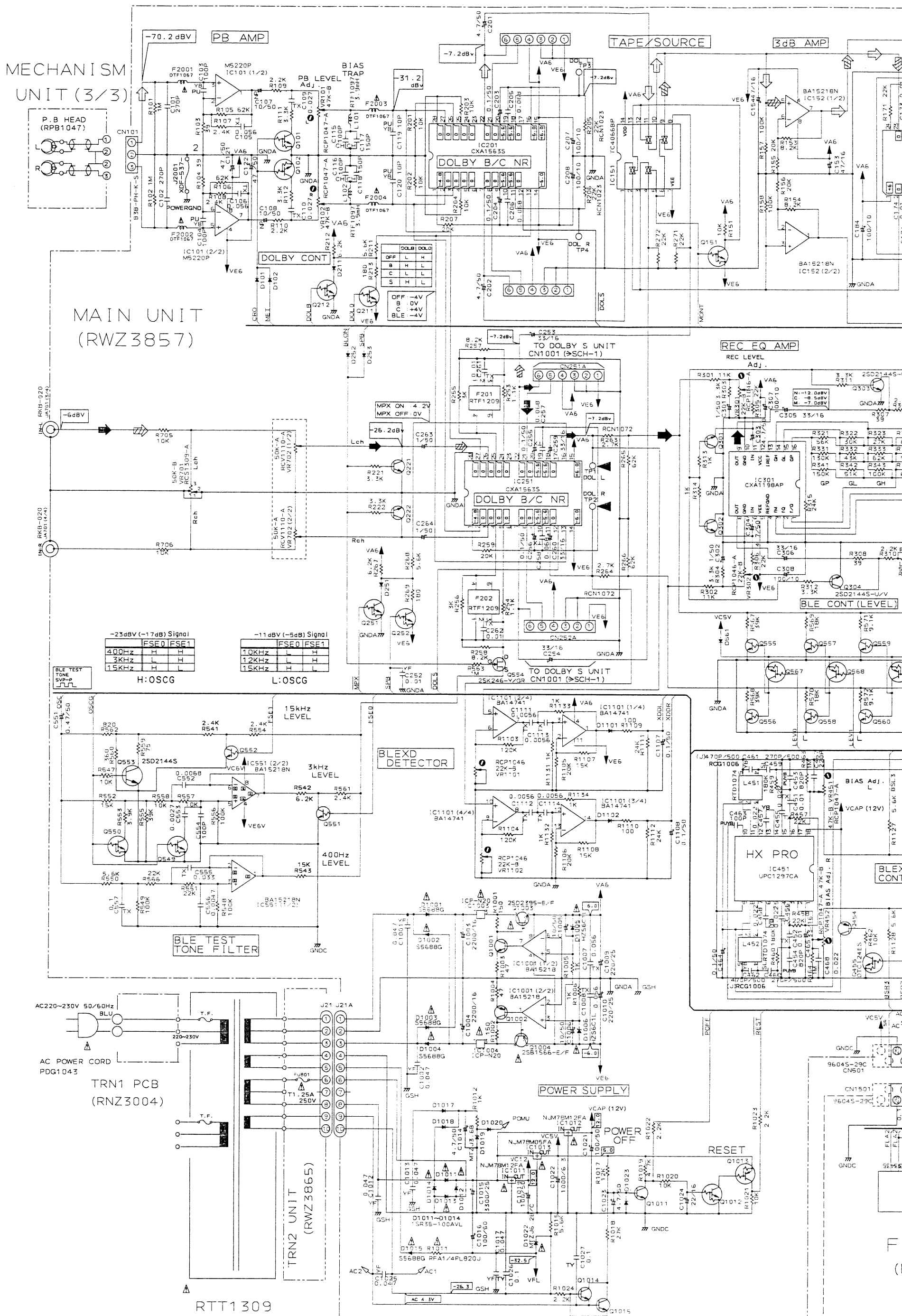
NOTE FOR PCB DIAGRAMS:
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

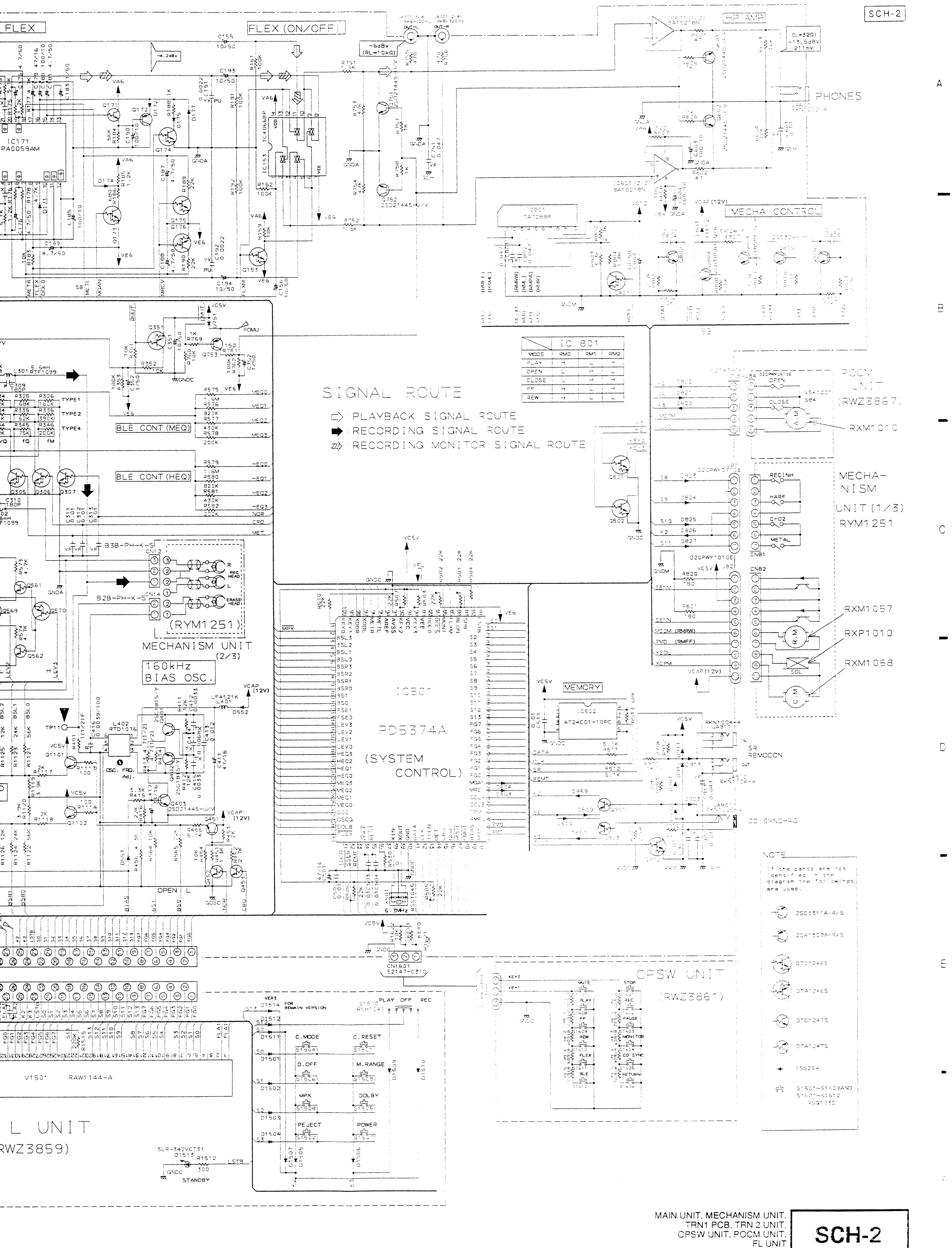
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

• The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.



3.2 MAIN, MECHANISM, FL, OPSW, POCM, TRN 2 UNIT AND TRN 1 PCB





4. PCB PARTS LIST

NOTES:

- Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
- The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by “ \odot ” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.
Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47K ohm (tolerance is shown by J=5%, and K=10%).
560 Ω \rightarrow 56 $\times 10^1 \rightarrow$ 561RD1/4PU $\boxed{561} J$
47 k Ω \rightarrow 47 $\times 10^3 \rightarrow$ 473RD1/4PU $\boxed{473} J$
0.5 Ω \rightarrow 0R5RN2H $\boxed{0R5} K$
1 Ω \rightarrow 1R0RS1P $\boxed{1R0} K$
Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62 k Ω \rightarrow 562 $\times 10^1 \rightarrow$ 5621RN1/4PC $\boxed{5621} F$

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
LIST OF ASSEMBLIES				\triangle	Q1003	2SD2395	
NSP	MOTHER UNIT	RWM1908			Q554	2SK246	
	└ MAIN UNIT	RWZ3857			Q1013, Q351, Q567-Q570	DTA124ES	
	└└ DOLBY S UNIT	RWX1120			Q901, Q9030	DTA124TS	
	└ FL UNIT	RWZ3859			Q101, Q1012, Q102, Q151, Q153	DTC124ES	
NSP	└ OPSW UNIT	RWZ3861			Q173-Q176, Q211, Q212	DTC124ES	
	└ TRN 2 UNIT	RWZ3865			Q251, Q252, Q305-Q307, Q455	DTC124ES	
NSP	└ POCM UNIT	RWZ3867			Q501, Q502, Q549, Q550, Q801	DTC124ES	
					Q902	DTC124ES	
					Q171, Q452, Q453, Q551, Q552	DTC124TS	
MAIN UNIT				\triangle	Q555-Q562	DTC124TS	
SEMICONDUCTORS					D1011-D1014	1SR35-100AVL	
	IC502	AT24C01-10PC			D101, D1017, D1018, D102, D1020	1SS254	
	IC1101	BA14741			D1023, D1101, D1102, D1514	1SS254	
	IC1001	BA15218			D171, D172, D174, D175, D177	1SS254	
	IC152, IC551, IC601	BA15218N			D211, D251-D253, D503, D504	1SS254	
	IC301	CXA1198AP			D509, D510, D551, D552, D561	1SS254	
	IC201, IC251	CXA1563S		\triangle	D751, D820-D827, D859, D860	1SS254	
\triangle	IC1003, IC1004	ICP-N20			D901-D903, D911-D913	1SS254	
	IC101	M5220P		\triangle	D1005, D1006	HZS6C1L	
\triangle	IC1013	NJM78M05FA		\triangle	D1019	MTZJ3.6B	
\triangle	IC1011, IC1012	NJM78M12FA		\triangle	D1022	MTZJ6.2B	
				\triangle	D1001-D1004, D1015, D801	S5688G	
				COILS AND FILTERS			
	IC171	PA0059AM		\triangle	F2001-F2004	DTF1067	
	IC501	PD5374A			L401	LFA121K	
	IC801	TA7288P			X501	RSS1045	
	IC151, IC153	TC4066BP			L451, L452	RTD1074	
	IC451	UPC1297CA			L402	RTD1076	
\triangle	Q1002, Q172, Q454, Q753	2SA1309A					
	Q1004	2SB1566			L101, L102	RTF1097	
	Q401, Q402	2SC1815			L301, L302	RTF1099	
	Q805	2SC3246			F201, F202	RTF1209	
	Q1001, Q1011, Q1014, Q1015	2SC3311A		CAPACITORS			
	Q1101, Q1102, Q221, Q222	2SC3311A			C115, C116	CCCCH101J50	
	Q301, Q302, Q451, Q802, Q806	2SC3311A			C117, C118	CCCCH151J50	
	Q803, Q804	2SD1858X			C459, C460	CCCSL271K500	
	Q303, Q304, Q403, Q553	2SD2144S			C121, C122, C2001, C2002	CCCSL470J50	
	Q601, Q602, Q751, Q752	2SD2144S			C554	CCSQCH101J50	

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.	Mark	No.
	C107, C108	CEANP100M50		RESISTORS					R332
	C183, C263, C264, C301, C302	CEAS010M50			R205, R206 (22k Ω)	RCN1023			R1003, R1004
	C352, C752	CEAS010M50			R401	RD1/2LMF010J			R755, R756
	C1005, C1006, C155, C156	CEAS100M50			R413, R414	RD1/2VM4R7J			R1019, R177
	C193, C194, C351, C803	CEAS100M50			R543	RD1/4PU153J			R753, R754
					R541	RD1/4PU242J			
	C180, C184, C185, C190	CEAS101M10			R542	RD1/4PU622J			R173, R174
	C207, C208, C307, C308	CEAS101M10			R559	RD1/4PU750J			R342
	C603, C604	CEAS101M10			R607, R608	RD1/6PM101J			R1015, R112
	C1016, C1019, C1021	CEAS101M50			R1005, R1006, R1012, R1133, R1134	RD1/6PM102J			R550
	C1022	CEAS102M6R3			R188, R313, R314, R605, R606	RD1/6PM102J			R1121, R1122
	C1024	CEAS220M16							R212, R267
	C1009, C1010	CEAS221M25			R757-R759, R911	RD1/6PM102J			R105, R106,
	C1003, C1004	CEAS222M16			R1020, R1021, R159, R1621, R1622	RD1/6PM103J			R335, R344
	C253, C254, C259, C260	CEAS330M16			R183, R351, R352, R462	RD1/6PM103J			R186
	C305, C306, C417, C465	CEAS330M16			R557, R558, R603, R604	RD1/6PM103J			R325
					R705, R706, R760	RD1/6PM103J			
									R345
	C1015	CEAS332M25			R157, R158, R161, R162	RD1/6PM104J			R562
	C153, C154, C179, C411, C501	CEAS470M16			R191, R192, R343, R353	RD1/6PM104J			R153, R154,
	C1014, C1023, C175, C176, C181	CEAS4R7M50			R548, R549, R556, R762	RD1/6PM104J			R324
	C187-C189, C201, C202	CEAS4R7M50			R101, R102, R563	RD1/6PM105J			R334
	C303, C304	CEAS4R7M50			R253, R254	RD1/6PM112J			
	C1107, C1108, C203, C204	CEASR10M50			R301, R302	RD1/6PM113J			R1011
	C255, C256, C464	CEASR10M50			R175, R176, R185	RD1/6PM122J			R807
	C551	CEASR47M50			R1017, R1125, R1126, R411, R412	RD1/6PM123J			VR1101, VR
	C412, C415	CFTXA332J50			R451	RD1/6PM132J			VR101, VR1
	C1111-C1114	CFTXA562J50			R331	RD1/6PM134J			VR701
	C414	CFTXA682J50							VR702
	C173, C174, C261, C262	CFTYA103J50			R1001, R1002, R761	RD1/6PM151J			Other Resist
	C451, C452	CFTYA103J50			R751, R752, R808, R810	RD1/6PM152J			
	C1026, C1027, C557	CFTYA104J50			R552	RD1/6PM153J			OTHERS
	C413	CFTYA123J50			R341	RD1/6PM154J			CN1601 3P
					R326	RD1/6PM164J			CN84 5P
	C455, C456	CFTYA223J50							CN501 29
	C109, C110	CFTYA273J50			R213, R269	RD1/6PM181J			CN14 C
	C555	CFTYA333J50			R459, R460	RD1/6PM184J			CN101, CN1
	C1007, C1008, C105, C106	CFTYA563J50			R1117, R1118	RD1/6PM202J			
	C205, C206, C257, C258	CFTYA683J50			R155, R156, R207	RD1/6PM203J			SC
					R346	RD1/6PM204J			SC
	C119, C120	CKCYB101K50							JA901 M
	C252, C311-C313, C601	CKCYF103Z50			R902	RD1/6PM221J			JA701 4P
	C901, C902	CKCYF103Z50			R1024, R109, R110, R309, R310	RD1/6PM222J			JA601 HI
	C1001, C1002, C1012, C1013, C1017	CKCYF473Z50			R171, R189, R190, R271, R272	RD1/6PM223J			
	C1025, C751, C801, C802, C911	CKCYF473Z50			R305, R306, R416, R457, R458	RD1/6PM223J			JA911, JA912
					R501, R551, R566, R903	RD1/6PM223J			PC
									EA
	C103, C104, C463	CKPUYB101K50							
	C453, C454	CKPUYB821K50			R107, R108, R554, R561	RD1/6PM242J			
	C191, C192	CKPUYX222M16			R1123, R1124, R315	RD1/6PM243J			
	C467, C468	CKSQYB221K50			R452, R802	RD1/6PM272J			DOLBY S UN
	C457, C458	CKSQYB223K50			R1018, R323	RD1/6PM273J			
					R901, R912	RD1/6PM274J			
									SEMICONDUCT
	C553	CKSQYB272K50							IC1001
	C556	CKSQYB472K50			R255, R256	RD1/6PM302J			
	C552	CKSQYB682K50			R322	RD1/6PM303J			CAPACITORS
	C502-C504, C511, C804, C805	CKSQYF103Z50			R560	RD1/6PM331J			C1017
	C309, C310	CQPA181J100			R111, R112, R221, R222	RD1/6PM332J			C1023, C103
					R303, R304, R311, R312, R415	RD1/6PM332J			C1007, C101
	C101, C102	CQPA271J100							C1027, C103
	C416	CQPA392J100			R803, R809	RD1/6PM332J			C1001, C101
	C461, C462 (470pF/500V)	RCG1006			R103, R104, R307, R308	RD1/6PM390J			C1003, C100
					R1119, R1120, R553	RD1/6PM392J			
					R555	RD1/6PM393J			
					R336	RD1/6PM394J			

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51J50

71K500

70J50

1101J50

Mark	No.	Description	Parts No.
	C107, C108		CEANP100M50
	C183, C263, C264, C301, C302		CEAS010M50
	C352, C752		CEAS010M50
	C1005, C1006, C155, C156		CEAS100M50
	C193, C194, C351, C803		CEAS100M50
	C180, C184, C185, C190		CEAS101M10
	C207, C208, C307, C308		CEAS101M10
	C603, C604		CEAS101M10
	C1016, C1019, C1021		CEAS101M50
	C1022		CEAS102M6R3
	C1024		CEAS220M16
	C1009, C1010		CEAS221M25
	C1003, C1004		CEAS222M16
	C253, C254, C259, C260		CEAS330M16
	C305, C306, C417, C465		CEAS330M16
	C1015		CEAS332M25
	C153, C154, C179, C411, C501		CEAS470M16
	C1014, C1023, C175, C176, C181		CEAS4R7M50
	C187-C189, C201, C202		CEAS4R7M50
	C303, C304		CEAS4R7M50
	C1107, C1108, C203, C204		CEASR10M50
	C255, C256, C464		CEASR10M50
	C551		CEASR47M50
	C412, C415		CFTXA332J50
	C1111-C1114		CFTXA562J50
	C414		CFTXA682J50
	C173, C174, C261, C262		CFTYA103J50
	C451, C452		CFTYA103J50
	C1026, C1027, C557		CFTYA104J50
	C413		CFTYA123J50
	C455, C456		CFTYA223J50
	C109, C110		CFTYA273J50
	C555		CFTYA333J50
	C1007, C1008, C105, C106		CFTYA563J50
	C205, C206, C257, C258		CFTYA683J50
	C119, C120		CKCYB101K50
	C252, C311-C313, C601		CKCYF103Z50
	C901, C902		CKCYF103Z50
	C1001, C1002, C1012, C1013, C1017		CKCYF473Z50
	C1025, C751, C801, C802, C911		CKCYF473Z50
	C103, C104, C463		CKPUYB101K50
	C453, C454		CKPUYB821K50
	C191, C192		CKPUYX222M16
	C467, C468		CKSQYB221K50
	C457, C458		CKSQYB223K50
	C553		CKSQYB272K50
	C556		CKSQYB472K50
	C552		CKSQYB682K50
	C502-C504, C511, C804, C805		CKSQYF103Z50
	C309, C310		CQPA181J100
	C101, C102		CQPA271J100
	C416		CQPA392J100
	C461, C462 (470pF/500V)		RCG1006

Mark	No.	Description	Parts No.
RESISTORS			
	R205, R206 (22k Ω)		RCN1023
	R401		RD1/2LMF010J
	R413, R414		RD1/2VM4R7J
	R543		RD1/4PU153J
	R541		RD1/4PU242J
	R542		RD1/4PU622J
	R559		RD1/4PU750J
	R607, R608		RD1/6PM101J
	R1005, R1006, R1012, R1133, R1134		RD1/6PM102J
	R188, R313, R314, R605, R606		RD1/6PM102J
	R757-R759, R911		RD1/6PM102J
	R1020, R1021, R159, R1621, R1622		RD1/6PM103J
	R183, R351, R352, R462		RD1/6PM103J
	R557, R558, R603, R604		RD1/6PM103J
	R705, R706, R760		RD1/6PM103J
	R157, R158, R161, R162		RD1/6PM104J
	R191, R192, R343, R353		RD1/6PM104J
	R548, R549, R556, R762		RD1/6PM104J
	R101, R102, R563		RD1/6PM105J
	R253, R254		RD1/6PM112J
	R301, R302		RD1/6PM113J
	R175, R176, R185		RD1/6PM122J
	R1017, R1125, R1126, R411, R412		RD1/6PM123J
	R451		RD1/6PM132J
	R331		RD1/6PM134J
	R1001, R1002, R761		RD1/6PM151J
	R751, R752, R808, R810		RD1/6PM152J
	R552		RD1/6PM153J
	R341		RD1/6PM154J
	R326		RD1/6PM164J
	R213, R269		RD1/6PM181J
	R459, R460		RD1/6PM184J
	R1117, R1118		RD1/6PM202J
	R155, R156, R207		RD1/6PM203J
	R346		RD1/6PM204J
	R902		RD1/6PM221J
	R1024, R109, R110, R309, R310		RD1/6PM222J
	R171, R189, R190, R271, R272		RD1/6PM223J
	R305, R306, R416, R457, R458		RD1/6PM223J
	R501, R551, R566, R903		RD1/6PM223J
	R107, R108, R554, R561		RD1/6PM242J
	R1123, R1124, R315		RD1/6PM243J
	R452, R802		RD1/6PM272J
	R1018, R323		RD1/6PM273J
	R901, R912		RD1/6PM274J
	R255, R256		RD1/6PM302J
	R322		RD1/6PM303J
	R560		RD1/6PM331J
	R111, R112, R221, R222		RD1/6PM332J
	R303, R304, R311, R312, R415		RD1/6PM332J
	R803, R809		RD1/6PM332J
	R103, R104, R307, R308		RD1/6PM390J
	R1119, R1120, R553		RD1/6PM392J
	R555		RD1/6PM393J
	R336		RD1/6PM394J

Mark	No.	Description	Parts No.
	R332		RD1/6PM433J
	R1003, R1004, R601, R602		RD1/6PM470J
	R755, R756		RD1/6PM471J
	R1019, R177, R178		RD1/6PM472J
	R753, R754		RD1/6PM473J
	R173, R174		RD1/6PM512J
	R342		RD1/6PM513J
	R1015, R1127, R1128, R211, R268		RD1/6PM562J
	R550		RD1/6PM562J
	R1121, R1122, R184, R321		RD1/6PM563J
	R212, R267		RD1/6PM622J
	R105, R106, R265, R266, R333		RD1/6PM623J
	R335, R344		RD1/6PM623J
	R186		RD1/6PM681J
	R325		RD1/6PM683J
	R345		RD1/6PM753J
	R562		RD1/6PM821J
	R153, R154, R257, R258		RD1/6PM822J
	R324		RD1/6PM823J
	R334		RD1/6PM913J
	R1011		RFA1/4PL820J
	R807		RS2LMF560J
	VR1101, VR1102, VR301, VR302 (22k Ω)		RCP1046
	VR101, VR102, VR451, VR452 (47k Ω)		RCP1047
	VR701		RCS1039
	VR702		RCV1110
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN1601 3P JUMPER CONNECTOR		52147-0310
	CN84 5P JUMPER CONNECTOR		52147-0510
	CN501 29P JUMPER CONNECTOR		9604S-29C
	CN14 CONNECTOR POST		B2B-PH-K-S
	CN101, CN12 CONNECTOR POST 3P		B3B-PH-K-S
	SCREW		BBZ30P080FMC
	SCREW		BMZ30P080FMC
	JA901 MINI JACK		PKN1005
	JA701 4P PIN JACK		RKB-020
	JA601 HEADPHONE JACK		RKN1002
	JA911, JA912 REMOTE CONTROL JACK		RKN1004
	PCB BINDER		VEF1008
	EARTH METAL FITTING		VNF-091

DOLBY S UNIT

SEMICONDUCTORS

IC1001	CXA1917S
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CAPACITORS

C1017	CEJA010M50
C1023, C1031, C1037	CEJAR10M50
C1007, C1015, C1029, C1039	CEJAR22M50
C1027, C1035	CEJAR47M50
C1001, C1011, C1025, C1055	CKSQYB104K25
C1003, C1005	CKSQYB182K50

Mark	No.	Description	Parts No.
	C1045		CKSQYB222K50
	C1013, C1053		CKSQYB223K50
	C1033, C1049		CKSQYB393K50
	C1047		CKSQYB471K50
	C1041		CKSQYB473K50
	C1019		CKSQYB681K50
	C1021, C1043		CKSQYB822K50

RESISTORS

All Resistors	RS1/10S□□□J
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OTHERS

CN1001	6033B-06Z029
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FL UNIT

SEMICONDUCTORS

D1501-D1507, D1509-D1512	1SS254
D1513	SLR-342VCT31

SWITCHES AND RELAYS

S1501, S1502, S1504-S1509	RSG1030
S1510	RSH1041

CAPACITORS

C1502	CKSQYBi04K25
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RESISTORS

All Resistors	RD1/6PM□□□J
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OTHERS

CN1501 29P FFC CONNECTOR	9604S-29C
V1501 FL INDICATOR TUBE	RAW1144

OPSW UNIT

SWITCHES AND RELAYS

S1601-S1612	RSG1030
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RESISTORS

All Resistors	RD1/6PM□□□J
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TRN 2 UNIT

TRN 2 unit has no service parts.

POCM UNIT

OTHERS

REAF SWITCH	VSK1011
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5. TEST MODE

1. Entering the Test Mode

In case of STOP mode:

- To enter the test mode, press COUNTER MODE + COUNTER RESET + PAUSE at a time.

2. Canceling test mode

- Press COUNTER RESET key.
- Press STANDBY key.
- Turn the power OFF.

The test mode is canceled by executing any of the above.

3. Test mode major items

- CD sync, SW check
- BLE adjustment, BLE-XD adjustment
- FLEX monitor check

① SW operation check

The test mode is executed as follows.

Counter Display	Key Input	Adjustment and Check items
* * : 10	All keys other than COUNTER MODE key	<ul style="list-style-type: none">● In this mode, the mechanism is operated without the cassette half.● SW check The following appear on the counter.<ul style="list-style-type: none">• Cassette half SW check With the cassette half : " h * : 10" Without the half : " * : 10"• Erase-protection detection SW check Recordable : " r * : 10" Not recordable : " * : 10"• Timer SW check TIMER REC : " * R : 10" OFF : " * : 10" TIMER PLAY : " * P : 10"● CD sync check Connect a code, let the input/output be short-circuited, and press CD SYNCHRO key. " CD SYNC " will light up.● Tape position SW check The following appear in the same manner as in normal condition. NORMAL : " TYPE I " CrO₂ : " TYPE II " METAL : " TYPE IV "

② BLE Adjustment Mode

● Entering the BLE Adjustment Mode

To enter the BLE adjustment mode, press BLE key when " ** : 10 " appears on the counter.

After that, the adjustment mode is changed each time BLE key is pressed.

When " * * : 10 " is not displayed on the counter, first press STOP key and perform the above procedures.

- **Canceling BLE adjustment mode**

To cancel the BLE adjustment mode, press STOP key. The mechanism operation check mode is set.

Counter Display	Key Input	LINE MUTE	REC MUTE	BIAS	Adjustment and Check items
: 30	BLE	OFF	ON	OFF	
400	BLE	OFF	ON	OFF	<p>● 400 Hz OUTPUT LEVEL CHECK MODE Check so that the meter indicates as follows. (LINE OUT output = -20.5 to -25 dBv)</p> <p>□ -□- -□- -□- -□- -□- -□- -□- -□- -□- □ ■ ■ ■ ■ ■ □ ■ ■ ■ ■ ■ ■ ■</p>
3 k	BLE	OFF	ON	OFF	<p>● 3 kHz OUTPUT LEVEL CHECK MODE Check so that the meter indicates as follows. (LINE OUT output = -20.5 to -25 dBv)</p> <p>□ -□- -□- -□- -□- -□- -□- -□- -□- -□- □ ■ ■ ■ ■ ■ □ ■ ■ ■ ■ ■ ■ ■</p>
15 k	BLE	OFF	ON	OFF	<p>● 15 kHz OUTPUT LEVEL CHECK MODE Check so that the meter indicates as follows. (LINE OUT output = -20.5 to -25 dBv)</p> <p>□ -□- -□- -□- -□- -□- -□- -□- -□- -□- □ ■ ■ ■ ■ ■ □ ■ ■ ■ ■ ■ ■ ■</p>
10 k	BLE	OFF	ON	OFF	<p>● 10 kHz OUTPUT LEVEL CHECK MODE Check so that the meter indicates as follows. (LINE OUT output = -8.5 to -13 dBv)</p> <p>□ -□- -□- -□- -□- -□- -□- -□- -□- -□- □ ■ ■ ■ ■ □ □ □ ■ ■ ■ ■ ■ ■</p>
12 k	BLE	OFF	ON	OFF	<p>● 12 kHz OUTPUT LEVEL CHECK MODE Check so that the meter indicates as follows. (LINE OUT output = -8.5 to -13 dBv)</p> <p>□ -□- -□- -□- -□- -□- -□- -□- -□- -□- □ ■ ■ ■ ■ □ □ □ ■ ■ ■ ■ ■ ■</p>
15 k	BLE	OFF	ON	OFF	<p>● 15 kHz OUTPUT LEVEL CHECK MODE Check so that the meter indicates as follows. (LINE OUT output -8.5 to -13 dBv)</p> <p>□ -□- -□- -□- -□- -□- -□- -□- -□- -□- □ ■ ■ ■ ■ □ □ □ ■ ■ ■ ■ ■ ■</p>

※ ■ : Stands for "lights up"

☐ : Stands for "goes off"

-□- : Stands for "lights up" or "blinks"

Counter Display	Key Input	LINE MUTE	REC MUTE	BIAS	Adjustment and Check items
HPFL	BLE	OFF	ON	OFF	<p>● BLE XD LCH HPF ADJUSTMENT MODE Input signals to LINE IN so that a 12 kHz/−11 dBV signal is output from LINE OUT.</p> <p>□ □ □ □ -□- -□- -□- □ □ □ □ □</p> <p>■ ■ ■ ■ □ □ □ ■ ■ ■ ■ ■</p>
HPFR	BLE	OFF	ON	OFF	<p>● BLE XD RCH HPF ADJUSTMENT MODE Same as above.</p>

※ ■ : Stands for "lights up"
□ : Stands for "goes off"
-□- : Stands for "lights up" or "blinks"

③ FLEX monitor mode

- **Entering FLEX monitor mode**

To enter the FLEX monitor mode, press FLEX key when " * * : 10 " appears on the counter.

After that, the FLEX MOVEMENT is turned ON and OFF each time FLEX key is pressed.

When " * * : 10 " is not displayed on the counter, first press STOP key and perform the above procedures.

- **Canceling FLEX monitor mode**

To cancel the FLEX monitor mode, press STOP key. The mechanism operation check mode is set.

Counter Display	Key Input	Adjustment and Check items
** : 40	FLEX basic operation key	<ul style="list-style-type: none"> Turned ON when "FLEX" lights up.

④ **Error No. display** (Refer to "Self-diagnosis".)

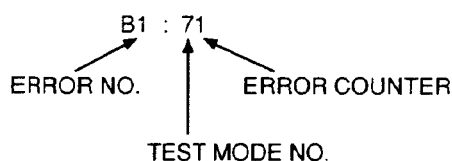
Press METER RANGE key when " * * : 10 " appears on the counter. An error No. will appear on the front panel FL area.

Self-diagnosis function

The self-diagnosis function automatically displays an error symbol on the front panel FL display area when an error occurs. The purpose of this function is to efficiently repair the product by reading an error symbol by the user to report it to a service personnel.

After an error occurs, even if the AC power cord is disconnected from an outlet, an error symbol can be displayed again by the following procedures.

- ① Enter the test mode. (See "Entering test mode".)
- ② Press METER RANGE key.
- ③ A display example is shown below.



- ④ When METER RANGE key is additionally pressed, the error counter changes to "2" then "3", and errors that have occurred in the past appear. (Up to three errors can be stored.)
- ⑤ After the repair is completed, clear the stored error numbers.
To perform this, press STOP key to enter the test mode, and press COUNTER MODE key and MUTE key.

Parts error occurred	Counter display	Producing condition	Possible causes
BLE	B1	The take-up side reel table stops during BLE operation.	<ul style="list-style-type: none"> • A tape was ended. • The reel motor stopped. • The capstan motor stopped.
	B2	Signals are not recorded on the tape during BLE operation.	<ul style="list-style-type: none"> • The characteristics of the tape used was significantly different from that of the reference tape. • The internal oscillator did not oscillate. • The compensation circuit parts were defective or did not correctly contact to each other.
Loading	L1	A tape does not reach an appropriate position by open/close operation.	<ul style="list-style-type: none"> • A tape was not set properly. • Foreign matters existed, etc.
Mechanism	M1	The take-up side reel table stops while the supply-side reel table continues operation. The tape may be jammed.	<ul style="list-style-type: none"> • The reel motor stopped. • A tape wound round the capstan due to static electricity, etc.

6. ADJUSTMENTS

1. MECHANICAL ADJUSTMENT

1. Tape Speed Adjustment			
Mode	Test tape	Adjustment position	Specification rating (playback frequency)
PLAY	Play the STD-301 tape (3kHz)	Tape speed adjustment hole	3000Hz \pm 5Hz

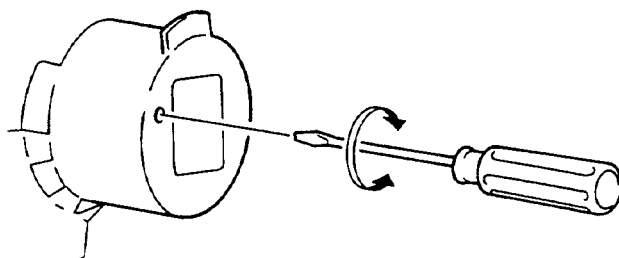


Fig.1 Tape speed adjustment

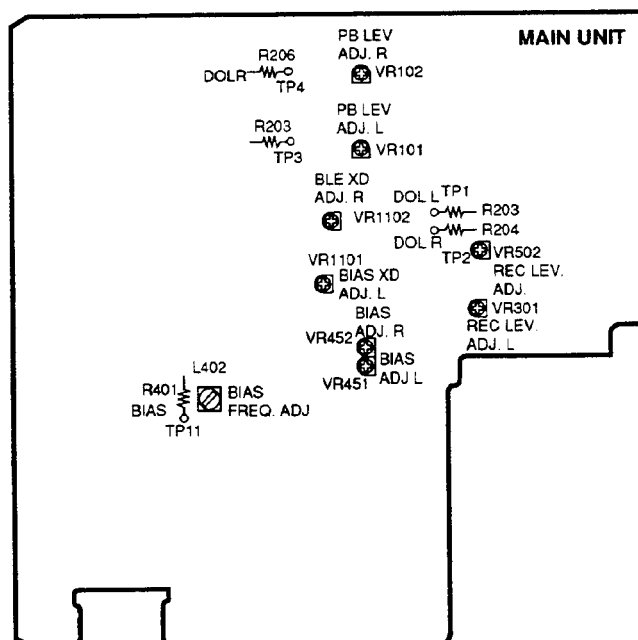


Fig.2 Adjusting points

CT-S550S

2. ELECTRICAL ADJUSTMENTS

Adjustment Conditions

- 1. The mechanical adjustments must be completed first.
- 2. The head must be cleaned and demagnetized.
- 3. Turn power on allow the deck to warm up for at least a few minutes before commencing any electrical adjustments.
- 4. The reference signal is 0 dBV = 1 Vrms.
- 5. Connect a 10 kΩ load resistance to the OUTPUT terminals.
- 6. Unless otherwise specified, the switches listed below are left in the positions indicated.

DOLBY NR : OFF
TAPE SELECTOR : NORM

Test Tapes

- STD-331E : Playback adjustments
(See Fig. 3)
- STD-631 or STD-632 : NORMAL blank tape
- STD-621 : CrO₂ blank tape
- STD-610 : METAL blank tape

* As the reference recording level is 250 nwb/m for STD-331E, the recording level will be higher by 4 dB for STD-331B (160 nwb/m). When adjusting, pay careful attention to the type of tape used.

List of Adjustments

Playback sections

- 1. Head azimuth adjustment.
- 2. Playback level adjustment.

Recording sections

- 1. Bias oscillator adjustment.
- 2. Recording bias adjustment.
- 3. Recording level adjustment.
- 4. Level meter check.
- 5. AUTO BLE adjustment.

NOTE: This unit has an automatic tape selection feature.

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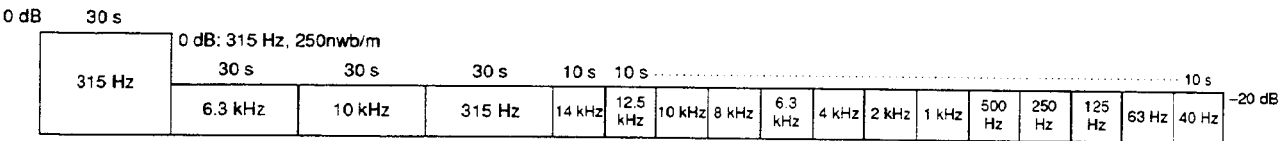
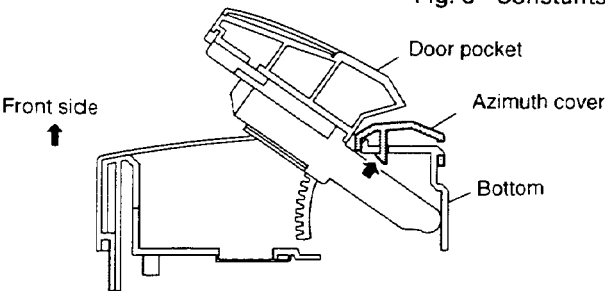


Fig. 3 Constants of the test tape STD-331E



Open the door and remove the two inner hooks (right and left). The azimuth cover will be removed.

- The front panels are not removed from the panel stay unless the azimuth cover is removed.

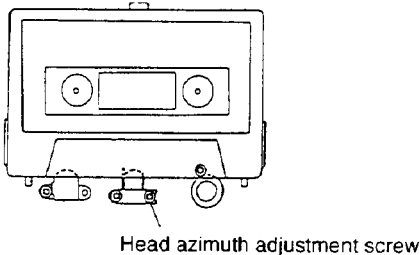
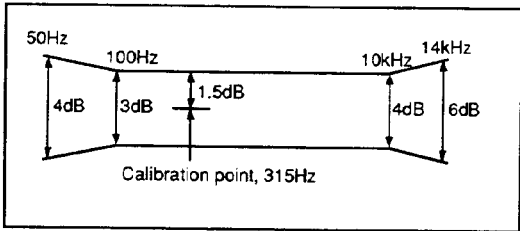


Fig. 4 Head azimuth adjustment

PLAY BACK



RECORDING

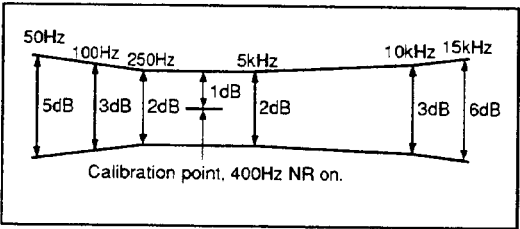


Fig. 5 Frequency response zone

PLAYBACK SECTION

1. Head Azimuth Adjustment

- Turn VR101, 102 to mechanical center positions.

• Turn VR101, 102 to mechanical center positions.						
No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 10 kHz/−20 dB section of STD-331E test tape.	Head azimuth adjustment screw. (See Fig. 4)	LINE OUT	Maximum playback signal level.	
2.	STOP	Lock the screw with silicon bond after completing adjustment.				

2. Playback Level Adjustment

- This adjustment determines the DOLBY NR level, and must be performed with great care.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	PLAY	Play the 315 Hz/0 dB section of the STD-331E test tape.	Deck	VR 101 (Lch) VR 102 (Rch)	TP. 3 (Lch) TP. 4 (Rch)	−6.7 dBV	This adjustment must be performed accurately for proper Dolby level setting.

RECORDING SECTION

1. Bias Oscillator Adjustment

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC	Load the STD-610 test tape with no input signal.	Deck	L402	TP. 11	160 kHz ± 1 kHz	

2. Recording Bias Adjustment

- After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC	Load the STD-631 or STD-632 test tape. Record the 315 Hz and 10 kHz signals at −20 dB input level and playback.	Deck	VR 451 (Lch) VR 452 (Rch)	LINE OUT	Repeatedly record, playback and adjust so that the playback level of 10 kHz signal becomes 0 dB ± 0.5 dB when compared with the 315 Hz signal.	

3. Recording Level Adjustment

No.	Mode	Input signal & test tape	Adjustment location		Measuring location	Adjustment value	Remarks
1.	REC PAUSE	Apply a 315 Hz/−4 dB signal to the line input terminals, load the STD-631 or STD-632 test tape.	Volume of the output level of the oscillator		TP. 3 (Lch) TP. 4 (Rch)	−11.2 dBV	
2.	REC/ PLAY	Record the above signal onto the STD-631 or STD-632 test tape, and playback.	Deck	VR 301 (Lch) VR 302 (Rch)		Repeatedly record, playback and adjust so that the playback signal level becomes −11.2 dBV.	
3.	REC/ PLAY	Record the above signal onto the STD-621 test tape, and playback.	Check			−11.2 dBV ± 1.5 dB	
4.	REC/ PLAY	Record the above signal onto the STD-610 test tape, and playback.	Check			−11.2 dBV ± 1.5 dB	

CT-S550S

4. Level Meter Check

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment Value	Remarks
1.	REC PAUSE	Apply a 315 Hz/ 0 dB signal to the Line Input terminals.	Volume of the output level of the oscillator	TP. 1 (Lch) TP. 2 (Rch)	Check that the level meters "0dB" light up within -7.2 dBV ± 1 dB of the signal output level.	

5. AUTO BLE Adjustment

- BLE adjustment should be performed after all other adjustments are completed.
- This adjustment should be performed in the test mode.
- Entering the test mode.
Turn on the power, and after more than 4 seconds, press the "COUNTER RESET" button, "COUNTER MODE" button and **II** (PAUSE) button simultaneously.
- Releasing the Test Mode.
Press the "COUNTER RESET" button.

No.	Mode	Input signal & test tape	Adjustment location	Measuring location	Adjustment Value	Remarks
1.	—	Set to test mode.	—	—	—	
2.		Press the BLE KEY (twice).		Level meter	The segments should light up or blink between -4 dB and $+5$ dB.	400 Hz confirmation (Test mode FL display: 400)
3.		Press the BLE KEY.				3 kHz confirmation (Test mode FL display: 3k)
4.		Press the BLE KEY.				15 kHz confirmation (Test mode FL display: 15k)
5.		Press the BLE KEY.				10 kHz confirmation (Test mode FL display: 10k)
6.		Press the BLE KEY.				12 kHz confirmation (Test mode FL display: 12k)
7.		Press the BLE KEY.				15 kHz confirmation (Test mode FL display: 15k)
8.	—	Press the BLE KEY. Input a signal to LINE IN so that a 12 kHz, -11 dBV signal is output from LINE OUT.	VR1101	Level meter	0 dB segment should light up or blink. (Lighting up or blinking of the both adjacent segments to 0 dB may be accepted.)	Filter adjustment (Test mode FL display: HPFL)
9.		Press the BLE KEY. Input a signal to LINE IN so that a 12 kHz, -11 dBV signal is output from LINE OUT.	VR1102			Filter adjustment (Test mode FL display: HPFR)

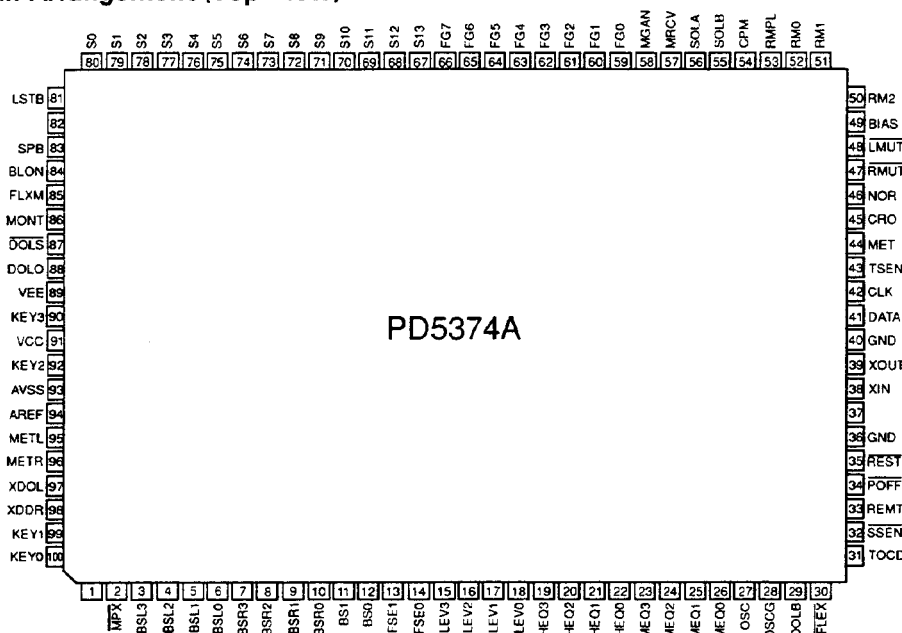
7. IC INFORMATION

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PD5374A (MAIN UNIT: IC501)

System Control IC

● Pin Arrangement (Top View)



● Pin Function

Pin No.	NAME	I/O	FUNCTION																											
1	—	I	Connected to the pull-down resistor.																											
2	MPX	O	Multiplex filter control pin (MPX ON: "L")																											
3	BSL3	O	BLE-XD L-CH BIAS control pin																											
4	BSL2	O																												
5	BSL1	O																												
6	BSL0	O																												
7	BSR3	O	BLE-XD R-CH BIAS control pin																											
8	BSR2	O																												
9	BSR1	O																												
10	BSR0	O																												
11	BS1	O	BLE BIAS control pin (When BLE OFF, BS1: "OPEN", BS0: "L")																											
12	BS0	O																												
13	FSE1	O	BLE oscillator frequency select pin <table><tr><th>Level</th><th>Frequencies selected</th><th>FSE0</th><th>FSE1</th></tr><tr><td rowspan="4">-23dB</td><td>400Hz</td><td>H</td><td>H</td></tr><tr><td>3kHz</td><td>L</td><td>H</td></tr><tr><td>15kHz</td><td>H</td><td>L</td></tr><tr><td>10kHz</td><td>H</td><td>L</td></tr><tr><td rowspan="3">-11dB</td><td>10kHz</td><td>L</td><td>H</td></tr><tr><td>12kHz</td><td>L</td><td>H</td></tr><tr><td>15kHz</td><td>H</td><td>L</td></tr></table>	Level	Frequencies selected	FSE0	FSE1	-23dB	400Hz	H	H	3kHz	L	H	15kHz	H	L	10kHz	H	L	-11dB	10kHz	L	H	12kHz	L	H	15kHz	H	L
Level	Frequencies selected	FSE0		FSE1																										
-23dB	400Hz	H		H																										
	3kHz	L		H																										
	15kHz	H		L																										
	10kHz	H		L																										
-11dB	10kHz	L		H																										
	12kHz	L	H																											
	15kHz	H	L																											
14	FSE0	O																												
15	LEV3	O	BLE LEVEL control pin When BLE OFF, LEV3 : "L", LEV2 : "H" LEV1 : "H", LEV0 : "H"																											
16	LEV2	O																												
17	LEV1	O																												
18	LEV0	O																												

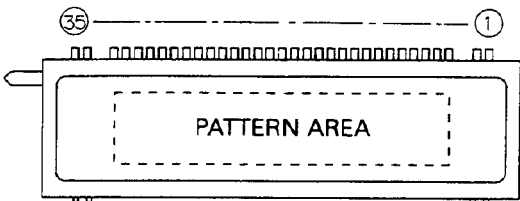
CT-S550S

Pin No.	NAME	I/O	FUNCTION																								
19	HEQ3	O	BLE HIGH EQ control pin When BLE OFF, HEQ3 : "L" , HEQ2 : "OPEN" HEQ1 : "OPEN", HEQ0 : "OPEN"																								
20	HEQ2	O																									
21	HEQ1	O																									
22	HEQ0	O																									
23	MEQ3	O	BLE MID EQ control pin When BLE OFF, MEQ3 : "L" , MEQ2 : "OPEN" MEQ1 : "OPEN", MEQ0 : "OPEN"																								
24	MEQ2	O																									
25	MEQ1	O																									
26	MEQ0	O																									
27	OSC	O	Square wave output pin for the BLE oscillator																								
28	OSCG	O	Gain select pin for the BLE oscillator (HIGH GAIN: "L")																								
29	DOLB	O	Dolby control pin (Dolby B: "H")																								
30	FLEX	O	FLEX IC ON/OFF control pin (FLEX OFF: "H")																								
31	TOCD	O	CD SYNCHRO output pin (SYNCHRO REC: "H")																								
32	SSEN	I	Sensing pulse input pin for the supply side																								
33	REMT	I	Remote control signal input pin																								
34	POFF	I	Power-off signal input pin (Power-off: "L")																								
35	REST	I	Reset signal input pin (Reset: "L")																								
36	GND	I	Connected to GND.																								
37	—	—	Open																								
38	XIN	I	Connected to the main clock. (6.3 MHz)																								
39	XOUT	O																									
40	GND	I	Connected to GND.																								
41	DATA	I/O	LAST MEMORY IC IC502 (AT24C01 to 10PC) communication pin																								
42	CLK	O																									
43	TSEN	I	Sensing pulse input pin for the take-up side																								
44	MET	O	Recording amplifier control pin according to the tape type Metal : "H", MET Chrome : "H", CRO Normal : "H", NOR																								
45	CRO	O																									
46	NOR	O																									
47	RMUT	O	REC MUTE control pin (MUTE OFF: "H")																								
48	LMUT	O	LINE MUTE control pin (MUTE OFF: "H")																								
49	BIAS	O	Bias control pin (Bias ON: "H")																								
50	RM2	O	Parts No. (TA7288P) Motor driver control pin																								
51	RM1	O	<table><tr><td></td><td>OFF</td><td>RML</td><td>RMR</td><td>OPEN</td><td>CLOSE</td></tr><tr><td>RM0</td><td>L</td><td>H</td><td>H</td><td>L</td><td>L</td></tr><tr><td>RM1</td><td>L</td><td>L</td><td>L</td><td>H</td><td>H</td></tr><tr><td>RM2</td><td>L</td><td>L</td><td>H</td><td>L</td><td>H</td></tr></table>		OFF	RML	RMR	OPEN	CLOSE	RM0	L	H	H	L	L	RM1	L	L	L	H	H	RM2	L	L	H	L	H
	OFF	RML	RMR	OPEN	CLOSE																						
RM0	L	H	H	L	L																						
RM1	L	L	L	H	H																						
RM2	L	L	H	L	H																						
52	RM0	O																									
53	RMPL	O	Reel motor torque control pin																								
54	CPM	O	Capstan motor control pin																								
55	SOLB	O	Solenoid control pin																								
56	SOLA	O																									
57	MRCV	O	Meter circuit recovery time control pin (Recovery FAST: "H")																								
58	MGAN	O	Meter circuit gain select pin (MS: "H")																								
59	FG0	O	FL grid scanning output pin (With built-in pull-down resistor)																								
60	FG1	O																									
61	FG2	O																									
62	FG3	O																									
63	FG4	O																									

Pin No.	NAME	I/O	FUNCTION
64	FG5	O	FL grid scanning output pin (With built-in pull-down resistor)
65	FG6	O	
66	FG7	O	
67	S13	O	FL segment scanning output pin (With built-in pull-down resistor)
68	S12	O	
69	S11	O	
70	S10	O	
71	S9	O	
72	S8	O	
73	S7	O	
74	S6	O	
75	S5	O	
76	S4	O	
77	S3	O	
78	S2	O	
79	S1	O	
80	S0	O	
81	LSTB	O	Standby LED control pin (STANDBY ON: "H")
82	—	O	Connected to the pull-down resistor.
83	SPB	O	DOLBY S playback: "H" (CT-S540S only)
84	BLON	O	BLE control pin (BLE: "H")
85	FLXM	O	Playback output control pin (Only when FLEX playback: "L")
86	MONT	O	MONITOR select control pin (TAPE: "L", SOURCE: "H")
87	DOLS	O	Dolby control pin (DOLBY S: "L".)
88	DOLO	O	Dolby control pin (DOLBY OFF: "H".)
89	VEE	I	Power supply pin for the built-in pull-down resistor
90	KEY3	I	Key scanning input pin
91	VCC	I	Power supply pin (+5V)
92	KEY2	I	Key scanning input pin
93	AVSS	I	Power supply pin for the built-in A/D converter AVSS is connected to GND and AREF is connected to 5V.
94	AREF	I	
95	METL	I	L-CH level meter input pin
96	METR	I	R-CH level meter input pin
97	XDDL	I	L-CH BLE-XD detector input pin
98	XDDR	I	R-CH BLE-XD detector input pin
99	KEY1	I	Key scanning input pin
100	KEY0	I	

8. FL INFORMATION

■ RAW1144 (FL UNIT: V1501)



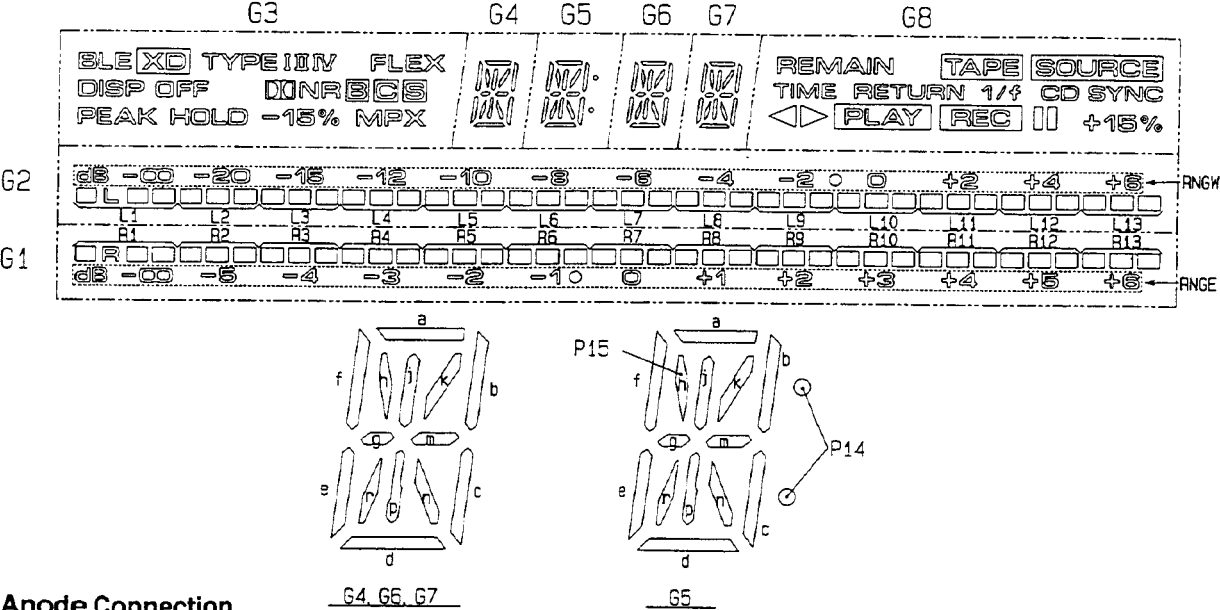
Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Assignment	F	F	NP	NL	P1	P2	P3	P4	NL	P5	P6	P7	P8	P9	NL	P10	P11

Pin No.	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Assignment	P12	P13	P14	NL	P15	P16	NL	G8	G7	G6	G5	G4	G3	G2	G1	NP	F	F

F:Filament G1~G8:Grid P1~P16:Anode NP:No pin NL:No lead

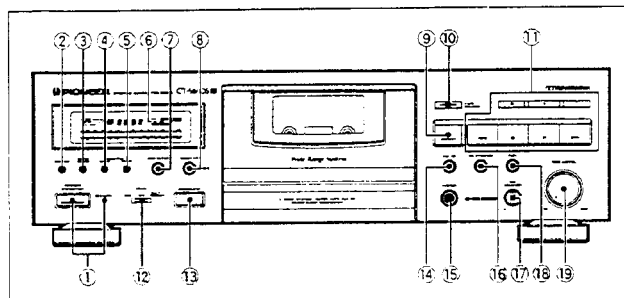
Grid Assignment



Anode Connection

	G8	G7	G6	G5	G4	G3	G2	G1
P1	TAPE	a	a	a	a	DISP OFF	L1	R1
P2	SOURCE	b	b	b	b	I	L2	R2
P3	II	f	f	f	f	IV	L3	R3
P4	▷	g	g	g	g	B	L4	R4
P5	◁	m	m	m	m	C	L5	R5
P6	PLAY	c	c	c	c	S	L6	R6
P7	REC	e	e	e	e		L7	R7
P8	TIME	d	d	d	d	MPX	L8	R8
P9	REMAIN	j	j	j	j	BLE	L9	R9
P10	RETURN	p	p	p	p	XD	L10	R10
P11	1/f	k	k	k	k	FLEX	L11	R11
P12	+15%	n	n	n	n	PEAK	L12	R12
P13	CD SYNC	r	r	r	r	ONR	L13	R13
P14		h	h	h	h	TYPE	RNGW	RNGE
P15						-15%		
P16						HOLD		

9. PANEL FACILITIES



① POWER STANDBY/ON switch and STANDBY indicator

The POWER switch activates the secondary transformer only. Even when the switch is in the STANDBY position, there will be a power flow to the deck's circuits as long as the power cord is connected to a power outlet.

② Display off button (DISP OFF)

Press to select the function display on or off.

③ Level meter range selector button (METER RANGE)

Press to select wide or expanded range on the level meter.

④ Tape counter mode button (COUNTER MODE)

⑤ Counter reset button (COUNTER RESET)

The tape capacity can be selected with this button while the REMAIN counter is displayed.

⑥ Function display

⑦ MPX FILTER button

⑧ Dolby* NR button (DOLBY NR OFF/B/C/S)

- * Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.
- "DOLBY", the double-D symbol and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

⑨ Return button (RETURN)

This button is used to fast forward or rewind the tape to a point near the counter reading "0000".

⑩ Monitor selector button (MONITOR)

Used to monitor the source sound or the actual recorded sound during recording.

⑪ Operation buttons

- ◀ : Rewind/music search
- : Stop
- ▶ : When pressed during stop, begins playback.
- ▶▶ : Fast forward/music search
- : Recording
- || : When pressed during playback or recording, pauses playback or recording. When pressed during pause, resumes play or starts recording.
- 0 : Recording mute

⑫ TIMER mode/repeat play switch (TIMER REC/OFF/PLAY-REPEAT)

⑬ OPEN/CLOSE button (▲)

⑭ BLE XD button

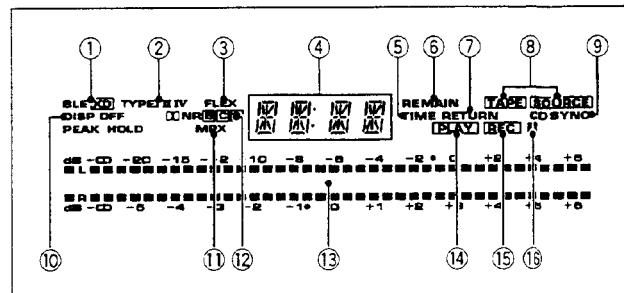
⑮ Headphones jack (PHONES)

⑯ CD-DECK SYNCHRO recording button (CD SYNCHRO)

⑰ Recording balance control (REC BALANCE)

⑱ FLEX button

⑲ Recording level control (REC LEVEL)



① BLE XD indicator

② Tape type indicators (TYPE I/II/IV)

Indicate the tape type in accordance with the loaded cassette.

③ FLEX indicator

This indicator lights when the FLEX button is pressed.

④ Counter indicator

Normally the tape, time or remaining time counter is displayed.

⑤ TIME counter indicator

Lights up in the time counter mode.

⑥ REMAIN counter indicator

Lights up in the remaining time counter mode.

⑦ RETURN indicator

Lights when the tape is returning to counter reading "0000" by pressing the RETURN button.

⑧ Monitor source indicators

TAPE: Recorded sound

The sound differs in the CT-S550S as the Dolby S-type NR used during recording is played back in Dolby B-type NR.

SOURCE: Original source sound

⑨ CD SYNC indicator

Lights when synchro recording from a CD player is being carried out.

⑩ Display off indicator (DISP OFF)

Lights when the display off function is selected.

⑪ MPX indicator

This indicator lights when the MPX filter button is set to ON (only when DOLBY NR is also set to ON).

⑫ DOLBY NR B/C/S indicator

⑬ Level meter with peak hold function

The ● between the -2 and 0 marks indicates the Dolby NR system's reference level.

Meter range:

Wide mode: -20 dB to +6 dB

Expand mode: -5 dB to +6 dB

⑭ PLAY indicator

Lights during playback.

⑮ REC indicator


Lights during recording.

⑯ Pause indicator (II)


10. SPECIFICATION

System	4-track, 2-channel stereo
Heads	
Recording/Playback head:	
Combined Hard permalloy recording/Hard permalloy playback head x 1	
Erasing head: Ferrite head x 1	
Motor	DC servo capstan motor x 1
	DC reel motor x 1
	DC assist motor x 1
Wow and Flutter	No more than 0.05% (WRMS, JIS)
	No more than $\pm 0.14\%$ (DIN)
Fast Winding Time	Approx. 90 seconds (C-60 tape)
Frequency Response (at -20 dB recording level)	
TYPE IV (Metal) tape	20 to 25,000 Hz (± 6 dB)
TYPE II (High/CrO ₂) Tape	20 to 19,000 Hz (± 6 dB)
TYPE I (Normal) Tape	20 to 19,000 Hz (± 6 dB)
Signal-to-Noise Ratio (Dolby NR OFF)	More than 59 dB
Noise Reduction Effect	
Dolby B-type NR ON	More than 10 dB (at 5 kHz)
Dolby C-type NR ON	More than 19 dB (at 5 kHz)
Dolby S-type NR ON	More than 22 dB (at 5 kHz)
Harmonic Distortion	No more than 0.6%
	(at -4 dB: 160 nwb/m)
Input (Sensitivity)	
LINE (INPUT)	100 mV (Input impedance 23 k Ω)
Output (Reference level)	
LINE (OUTPUT)	0.5 V (Output impedance 1.9 k Ω)
Headphones (PHONES)	1.4 mW (Load impedance 32 Ω)
Miscellaneous	
Power requirements	
U.K. model	AC 230—240 Volts~, 50/60 Hz
European model	AC 220—230 Volts~, 50/60 Hz
Power consumption	
CT-S550S	22 W
Dimensions	420 (W) x 125 (H) x 280 (D) mm
Weight (without packages)	
European model	4.1 kg
U.K. model	4.3 kg

Subfunctions

- DOLBY B-type, C-type and S-type NR Systems
When the monitoring function is used during a recording being made with Dolby S-type noise reduction, the recorded signals from the tape are played back via a Dolby B-type noise reduction.
- DOLBY HX PRO system
- MPX FILTER
- Headphones jack
- 4-digit electronic tape/time/remain counter
- Music search up to ± 15 selections
- Automatic space recording mute
- SUPER AUTO BLE XD tuning system
- FL level meter 12 +1 segments (with peak hold)
-  System remote control available
- CD • DECK SYNCHRO function
- Timer Recording/Playback (Automatic repeat playback ON)
- Auto tape selector
- FLEX system
- Last memory
- Tape return/return play
- Auto monitor selection (Tape/Source)
- Display off
- Power eject (Open/Close)

Accessories

Operating instructions	1
Connection cord with pin plugs	2
 Remote control cord	1
CD • DECK SYNCHRO control cord	1

NOTE:

Specifications and design subject to possible modifications without notice, due to improvements.